



SEQUENCE LISTING

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<150> PCT/US96/17957

<151> 1996-10-25

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	ttg gtc aaa gaa act ggt tac ttt ttt ata tat ggt cag gtt tta tat			749
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	act gat aag acc tac gcc atg gga cat cta att cag agg aag aag gtc			797
	Thr Asp Lys Thr Tyr Ala Met Gly His Leu Ile Gln Arg Lys Lys Val			
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	His Val Phe Gly Asp Glu Leu Ser Leu Val Thr Leu Phe Arg Cys Ile			
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Glu Pro Trp Leu His Ser Met Tyr His Gly Ala Ala Phe Gln Leu Thr  
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Thr Asp Leu Ser Pro Gly Leu Pro Ala Ala His Leu Ile Gly Ala Pro  
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Gln Asp Gly Leu Tyr Tyr Leu Tyr Cys Leu Val Gly Tyr Arg Gly Arg  
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 Leu Cys Leu Leu Val Met Phe Phe Met Val Leu Val Ala Leu Val Gly  
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 Glu Leu Arg Glu Ser Thr Ser Gln Met His Thr Ala Ser Ser Leu Glu  
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 Lys Gln Ile Gly His Pro Ser Pro Pro Pro Glu Lys Lys Glu Leu Arg  
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Lys Val Ala His Leu Thr Gly Lys Ser Asn Ser Arg Ser Met Pro Leu  
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 Glu Trp Glu Asp Thr Tyr Gly Ile Val Leu Leu Ser Gly Val Lys Tyr  
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 His Lys Val Tyr Met Arg Asn Ser Lys Tyr Pro Gln Asp Leu Val Met  
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tctttgaacc accagctcca ggagaaggca actccagtca gaacagcaga aataagcgtg 120
ccgttcaggg tccagaagaa acagtcactc aagactgctt gcaactgntt gcagacagtg 180
aaacaccaac tatacaaaaa ggctcccttc tgntgccaca tttgggcca ggaatggaga 240
gatttcttcg tctggaaaca ttttgccaaa ctcttcagat actctttnct ctctgggaat 300
caaaggaaaa tctctactta gattnacaca tttgttccca tgggtntctt aagttttaaa 360
aggggagtg ccttaggagg aaaaggggat aaatattggc caaggnaactg gttantttnt 420
aaatatgggc aggtttntat anctggtagg cctcgccatg ggcattnatt cangngagg 480
ncnntctttt gggntga 497
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<210> 10

<211> 27

<212> DNA

<213> Artificial Sequence

<220>

<221> primer\_bind

<223> primer

<400> 10

gtgggatcca gcctccgggc agagctg 27

<210> 11

<211> 33

<212> DNA

<213> Artificial Sequence

<220>

<221> primer\_bind

<223> primer

<400> 11

gtgaagcttt tattacagca gtttcaatgc acc 33

<210> 12

<211> 26

<212> DNA

<213> Artificial Sequence

<220>

<221> primer\_bind

<223> primer

<400> 12

gtgtcatgag cctccgggca gagctg 26

<210> 13

<211> 33

B23

<212> DNA  
<213> Artificial Sequence

<220>  
<221> primer\_bind  
<223> primer

<400> 13  
gtgaagcttt tattacagca gtttcaatgc acc

33

<210> 14  
<211> 28  
<212> DNA  
<213> Artificial Sequence

<220>  
<221> primer\_bind  
<223> primer

<400> 14  
gtgggatccc cgggcagagc tgcagggc

28

<210> 15  
<211> 33  
<212> DNA  
<213> Artificial Sequence

<220>  
<221> primer\_bind  
<223> primer

<400> 15  
gtgggatcct tattacagca gtttcaatgc acc

33

<210> 16  
<211> 129  
<212> DNA  
<213> Artificial Sequence

<220>  
<221> primer\_bind  
<223> primer

<400> 16  
gcgggatccg ccaccatgaa ctctttctcc acaagcgct tcggtccagt tgccttctcc 60  
ctggggctgc tcctgggtgtt gcctgctgcc ttccctgccc cagttgtgag acaaggggac 120  
ctggccagc 129

<210> 17  
<211> 30  
<212> DNA  
<213> Artificial Sequence

<220>  
<221> primer\_bind  
<223> primer

B23

<400> 17  
gtgggatcct tacagcagtt tcaatgcacc

30

<210> 18  
<211> 903  
<212> DNA  
<213> Homo sapiens

<220>  
<221> CDS  
<222> (1)..(798)

<400> 18  
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Met Asp Asp Ser Thr Glu Arg Glu Gln Ser Arg Leu Thr Ser Cys Leu  
1 5 10 15

aag aaa aga gaa gaa atg aaa ctg aag gag tgt gtt tcc atc ctc cca 96  
Lys Lys Arg Glu Glu Met Lys Leu Lys Glu Cys Val Ser Ile Leu Pro  
20 25 30

cgg aag gaa agc ccc tct gtc cga tcc tcc aaa gac gga aag ctg ctg 144  
Arg Lys Glu Ser Pro Ser Val Arg Ser Ser Lys Asp Gly Lys Leu Leu  
35 40 45

gct gca acc ttg ctg ctg gca ctg ctg tct tgc tgc ctc acg gtg gtg 192  
Ala Ala Thr Leu Leu Leu Ala Leu Leu Ser Cys Cys Leu Thr Val Val  
50 55 60

tct ttc tac cag gtg gcc gcc ctg caa ggg gac ctg gcc agc ctc cgg 240  
Ser Phe Tyr Gln Val Ala Ala Leu Gln Gly Asp Leu Ala Ser Leu Arg  
65 70 75 80

gca gag ctg cag ggc cac cac gcg gag aag ctg cca gca gga gca gga 288  
Ala Glu Leu Gln Gly His His Ala Glu Lys Leu Pro Ala Gly Ala Gly  
85 90 95

gcc ccc aag gcc ggc ctg gag gaa gct cca gct gtc acc gcg gga ctg 336  
Ala Pro Lys Ala Gly Leu Glu Glu Ala Pro Ala Val Thr Ala Gly Leu  
100 105 110

aaa atc ttt gaa cca cca gct cca gga gaa ggc aac tcc agt cag aac 384  
Lys Ile Phe Glu Pro Pro Ala Pro Gly Glu Gly Asn Ser Ser Gln Asn  
115 120 125

agc aga aat aag cgt gcc gtt cag ggt cca gaa gaa aca gga tct tac 432  
Ser Arg Asn Lys Arg Ala Val Gln Gly Pro Glu Glu Thr Gly Ser Tyr  
130 135 140

aca ttt gtt cca tgg ctt ctc agc ttt aaa agg gga agt gcc cta gaa 480  
Thr Phe Val Pro Trp Leu Leu Ser Phe Lys Arg Gly Ser Ala Leu Glu  
145 150 155 160

gaa aaa gag aat aaa ata ttg gtc aaa gaa act ggt tac ttt ttt ata 528  
Glu Lys Glu Asn Lys Ile Leu Val Lys Glu Thr Gly Tyr Phe Phe Ile  
165 170 175

tat ggt cag gtt tta tat act gat aag acc tac gcc atg gga cat cta 576



B23

Tyr Gly Gln Val Leu Tyr Thr Asp Lys Thr Tyr Ala Met Gly His Leu  
180 185 190

att cag agg aag aag gtc cat gtc ttt ggg gat gaa ttg agt ctg gtg 624  
Ile Gln Arg Lys Lys Val His Val Phe Gly Asp Glu Leu Ser Leu Val  
195 200 205

act ttg ttt cga tgt att caa aat atg cct gaa aca cta ccc aat aat 672  
Thr Leu Phe Arg Cys Ile Gln Asn Met Pro Glu Thr Leu Pro Asn Asn  
210 215 220

tcc tgc tat tca gct ggc att gca aaa ctg gaa gaa gga gat gaa ctc 720  
Ser Cys Tyr Ser Ala Gly Ile Ala Lys Leu Glu Glu Gly Asp Glu Leu  
225 230 235 240

caa ctt gca ata cca aga gaa aat gca caa ata tca ctg gat gga gat 768  
Gln Leu Ala Ile Pro Arg Glu Asn Ala Gln Ile Ser Leu Asp Gly Asp  
245 250 255

gtc aca ttt ttt ggt gca ttg aaa ctg ctg tgacctactt acaccatgtc 818  
Val Thr Phe Phe Gly Ala Leu Lys Leu Leu  
260 265

tgtagctatt ttcctccctt tctctgtacc tctaagaaga aagaatctaa ctgaaaatac 878

caaaaaaaaaa aaaaaaaaaa aaaaaa 903

<210> 19  
<211> 266  
<212> PRT  
<213> Homo sapiens

<400> 19  
Met Asp Asp Ser Thr Glu Arg Glu Gln Ser Arg Leu Thr Ser Cys Leu  
1 5 10 15

Lys Lys Arg Glu Glu Met Lys Leu Lys Glu Cys Val Ser Ile Leu Pro  
20 25 30

Arg Lys Glu Ser Pro Ser Val Arg Ser Ser Lys Asp Gly Lys Leu Leu  
35 40 45

Ala Ala Thr Leu Leu Leu Ala Leu Leu Ser Cys Cys Leu Thr Val Val  
50 55 60

Ser Phe Tyr Gln Val Ala Ala Leu Gln Gly Asp Leu Ala Ser Leu Arg  
65 70 75 80

Ala Glu Leu Gln Gly His His Ala Glu Lys Leu Pro Ala Gly Ala Gly  
85 90 95

Ala Pro Lys Ala Gly Leu Glu Glu Ala Pro Ala Val Thr Ala Gly Leu  
100 105 110

Lys Ile Phe Glu Pro Pro Ala Pro Gly Glu Gly Asn Ser Ser Gln Asn  
115 120 125

Ser Arg Asn Lys Arg Ala Val Gln Gly Pro Glu Glu Thr Gly Ser Tyr  
130 135 140

323

Thr Phe Val Pro Trp Leu Leu Ser Phe Lys Arg Gly Ser Ala Leu Glu  
145 150 155 160

Glu Lys Glu Asn Lys Ile Leu Val Lys Glu Thr Gly Tyr Phe Phe Ile  
165 170 175

Tyr Gly Gln Val Leu Tyr Thr Asp Lys Thr Tyr Ala Met Gly His Leu  
180 185 190

Ile Gln Arg Lys Lys Val His Val Phe Gly Asp Glu Leu Ser Leu Val  
195 200 205

Thr Leu Phe Arg Cys Ile Gln Asn Met Pro Glu Thr Leu Pro Asn Asn  
210 215 220

Ser Cys Tyr Ser Ala Gly Ile Ala Lys Leu Glu Glu Gly Asp Glu Leu  
225 230 235 240

Gln Leu Ala Ile Pro Arg Glu Asn Ala Gln Ile Ser Leu Asp Gly Asp  
245 250 255

Val Thr Phe Phe Gly Ala Leu Lys Leu Leu  
260 265

<210> 20  
<211> 136  
<212> PRT  
<213> Homo sapiens

<400> 20  
His Ser Val Leu His Leu Val Pro Ile Asn Ala Thr Ser Lys Asp Asp  
1 5 10 15

Ser Asp Val Thr Glu Val Met Trp Gln Pro Ala Leu Arg Arg Gly Arg  
20 25 30

Gly Leu Gln Ala Gln Gly Tyr Gly Val Arg Ile Gln Asp Ala Gly Val  
35 40 45

Tyr Leu Leu Tyr Ser Gln Val Leu Phe Gln Asp Val Thr Phe Thr Met  
50 55 60

Gly Gln Val Val Ser Arg Glu Gly Gln Gly Arg Gln Glu Thr Leu Phe  
65 70 75 80

Arg Cys Ile Arg Ser Met Pro Ser His Pro Asp Arg Ala Tyr Asn Ser  
85 90 95

Cys Tyr Ser Ala Gly Val Phe His Leu His Gln Gly Asp Ile Leu Ser  
100 105 110

Val Ile Ile Pro Arg Ala Arg Ala Lys Leu Asn Leu Ser Pro His Gly  
115 120 125

Thr Phe Leu Gly Phe Val Lys Leu  
130 135

B23

<210> 21  
 <211> 462  
 <212> DNA  
 <213> Homo sapiens

<400> 21  
 atggctgttc aggggtccgga agaaaccgtt actcaggact gccttcagct gatcgcagac 60  
 tctgaaactc cgaccatcca gaaaggttct tacacctttg ttccttggct gctttctttc 120  
 aaacgtgggt ctgccctgga agagaaagaa aacaaaatcc tggttaaaga aactgggttac 180  
 ttctttatct acggtcaggt tctttacact gataagacct acgccatggg tcacctgatt 240  
 cagcgtaaga aagttcacgt tttcgggtgac gagctgtctc tggttactct gtttcgctgc 300  
 attcagaaca tgccggaac tcttcctaac aactcctgct actctgctgg catcgcaaaa 360  
 ctggaagagg gtgatgaact gcagctggca attcctcgtg aaaacgcaca aatttctctg 420  
 gacggtgatg taaccttctt tgggtgactg aaacttctgt aa 462

<210> 22  
 <211> 1040  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> CDS  
 <222> (1)..(468)

<400> 22  
 cgc gtg gta gac ctc tca gct cct cct gca cca tgc ctg cct gga tgc 48  
 Arg Val Val Asp Leu Ser Ala Pro Pro Ala Pro Cys Leu Pro Gly Cys  
 1 5 10 15  
 cgc cat tct caa cat gat gat aat gga atg aac ctc aga aac aga act 96  
 Arg His Ser Gln His Asp Asp Asn Gly Met Asn Leu Arg Asn Arg Thr  
 20 25 30  
 tac aca ttt gtt cca tgg ctt ctc agc ttt aaa aga gga aat gcc ttg 144  
 Tyr Thr Phe Val Pro Trp Leu Leu Ser Phe Lys Arg Gly Asn Ala Leu  
 35 40 45  
 gag gag aaa gag aac aaa ata gtg gtg agg caa aca ggc tat ttc ttc 192  
 Glu Glu Lys Glu Asn Lys Ile Val Val Arg Gln Thr Gly Tyr Phe Phe  
 50 55 60  
 atc tac agc cag gtt cta tac acg gac ccc atc ttt gct atg ggt cat 240  
 Ile Tyr Ser Gln Val Leu Tyr Thr Asp Pro Ile Phe Ala Met Gly His  
 65 70 75 80  
 gtc atc cag agg aag aaa gta cac gtc ttt ggg gac gag ctg agc ctg 288  
 Val Ile Gln Arg Lys Lys Val His Val Phe Gly Asp Glu Leu Ser Leu  
 85 90 95  
 gtg acc ctg ttc cga tgt att cag aat atg ccc aaa aca ctg ccc aac 336  
 Val Thr Leu Phe Arg Cys Ile Gln Asn Met Pro Lys Thr Leu Pro Asn  
 100 105 110  
 aat tcc tgc tac tcg gct ggc atc gcg agg ctg gaa gaa gga gat gag 384  
 Asn Ser Cys Tyr Ser Ala Gly Ile Ala Arg Leu Glu Glu Gly Asp Glu  
 115 120 125  
 att cag ctt gca att cct cgg gag aat gca cag att tca cgc aac gga 432

B23

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Ile Gln Leu Ala Ile Pro Arg Glu Asn Ala Gln Ile Ser Arg Asn Gly
 130                      135                      140

gac gac acc ttc ttt ggt gcc cta aaa ctg ctg taa ctcacttgct      478
Asp Asp Thr Phe Phe Gly Ala Leu Lys Leu Leu
145                      150                      155

ggagtgcgtg atcccccttcc ctcgtcttct ctgtacctcc gagggagaaa cagacgactg 538
gaaaaactaa aagatgggga aagccgtcag cgaaagtttt ctcgtgaccc gttgaatctg 598
atccaaacca ggaaatataa cagacagcca caaccgaagt gtgccatgtg agttatgaga 658
aacggagccc gcgctcagaa agaccggatg aggaagaccg ttttctccag tcctttgcca 718
acacgcaccg caaccttgct ttttgccttg ggtgacacat gttcagaatg cagggagatt 778
tccttggtttt gcgatttgcc atgagaagag ggcccacaac tgcaggtcac tgaagcattc 838
acgctaagtc tcaggattta ctctcccttc tcatgctaag tacacacacg ctctttttcca 898
ggtaatacta tgggatacta tggaaagggt gtttggtttt aaatctagaa gtcttgaact 958
ggcaatagac aaaaatcctt ataaattcaa gtgtaaaata aacttaatta aaaaggttta 1018
agtggtgaaaa aaaaaaaaaa aa                                     1040

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<210> 23  
 <211> 155  
 <212> PRT  
 <213> Homo sapiens

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<400> 23
Arg Val Val Asp Leu Ser Ala Pro Pro Ala Pro Cys Leu Pro Gly Cys
 1          5          10          15
Arg His Ser Gln His Asp Asp Asn Gly Met Asn Leu Arg Asn Arg Thr
 20          25          30
Tyr Thr Phe Val Pro Trp Leu Leu Ser Phe Lys Arg Gly Asn Ala Leu
 35          40          45
Glu Glu Lys Glu Asn Lys Ile Val Val Arg Gln Thr Gly Tyr Phe Phe
 50          55          60
Ile Tyr Ser Gln Val Leu Tyr Thr Asp Pro Ile Phe Ala Met Gly His
 65          70          75          80
Val Ile Gln Arg Lys Lys Val His Val Phe Gly Asp Glu Leu Ser Leu
 85          90          95
Val Thr Leu Phe Arg Cys Ile Gln Asn Met Pro Lys Thr Leu Pro Asn
100          105          110
Asn Ser Cys Tyr Ser Ala Gly Ile Ala Arg Leu Glu Glu Gly Asp Glu
115          120          125
Ile Gln Leu Ala Ile Pro Arg Glu Asn Ala Gln Ile Ser Arg Asn Gly
130          135          140
Asp Asp Thr Phe Phe Gly Ala Leu Lys Leu Leu
145          150          155

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<210> 24  
 <211> 26  
 <212> DNA  
 <213> Artificial Sequence

B23

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<220>
<221> primer_bind
<223> primer

<400> 24
ccaccagctc caggagaagg caactc                                     26

<210> 25
<211> 19
<212> DNA
<213> Artificial Sequence

<220>
<221> primer_bind
<223> primer

<400> 25
accgcggggac tgaaaaatct                                         19

<210> 26
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<221> primer_bind
<223> primer

<400> 26
cacgcttatt tctgctgttc tga                                     23

<210> 27
<211> 657
<212> DNA
<213> Homo sapiens

<400> 27
taccaggtgg cggccgtgca aggggacctg gccagcctcc gggcagagct gcagggccac 60
cacgcggaga agctgccagc aagagcaaga gcccacaagg ccggtctggg ggaagctcca 120
gctgtcaccg caggactgaa aatctttgaa ccaccagctc caggagaagg caactccagt 180
cagagcagca gaaataagcg tgctattcag ggtgcagaag aaacagtcac tcaagactgc 240
ttgcaactga ttgcagacag tgaaacacca actatacaaa aaggatctta cacatttggt 300
ccatggcttc tcagctttaa aaggggaagt gccctagaag aaaaagagaa taaaatattg 360
gtcaaagaaa ctgggttactt ttttatatat ggtcagggtt tatacactga taagacctat 420
gccatgggac atctaattca gaggaaaaaa gtccatgtct ttggggatga attgagtctg 480
gtgactttgt ttcgatgtat tcaaaatatg cctgaaacac tacccaataa ttctgctat 540
tcagctggca ttgcaaaact ggaagaagga gatgaacttc aacttgcaat accacgagaa 600
aatgcacaaa tatcactgga tggagatgtc acattttttg gtgccctcaa actgctg 657

<210> 28
<211> 219
<212> PRT
<213> Homo sapiens

<400> 28

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B23

Tyr Gln Val Ala Ala Val Gln Gly Asp Leu Ala Ser Leu Arg Ala Glu  
 1 5 10 15  
 Leu Gln Gly His His Ala Glu Lys Leu Pro Ala Arg Ala Arg Ala Pro  
 20 25 30  
 Lys Ala Gly Leu Gly Glu Ala Pro Ala Val Thr Ala Gly Leu Lys Ile  
 35 40 45  
 Phe Glu Pro Pro Ala Pro Gly Glu Gly Asn Ser Ser Gln Ser Ser Arg  
 50 55 60  
 Asn Lys Arg Ala Ile Gln Gly Ala Glu Glu Thr Val Ile Gln Asp Cys  
 65 70 75 80  
 Leu Gln Leu Ile Ala Asp Ser Glu Thr Pro Thr Ile Gln Lys Gly Ser  
 85 90 95  
 Tyr Thr Phe Val Pro Trp Leu Leu Ser Phe Lys Arg Gly Ser Ala Leu  
 100 105 110  
 Glu Glu Lys Glu Asn Lys Ile Leu Val Lys Glu Thr Gly Tyr Phe Phe  
 115 120 125  
 Ile Tyr Gly Gln Val Leu Tyr Thr Asp Lys Thr Tyr Ala Met Gly His  
 130 135 140  
 Leu Ile Gln Arg Lys Lys Val His Val Phe Gly Asp Glu Leu Ser Leu  
 145 150 155 160  
 Val Thr Leu Phe Arg Cys Ile Gln Asn Met Pro Glu Thr Leu Pro Asn  
 165 170 175  
 Asn Ser Cys Tyr Ser Ala Gly Ile Ala Lys Leu Glu Glu Gly Asp Glu  
 180 185 190  
 Leu Gln Leu Ala Ile Pro Arg Glu Asn Ala Gln Ile Ser Leu Asp Gly  
 195 200 205  
 Asp Val Thr Phe Phe Gly Ala Leu Lys Leu Leu  
 210 215

<210> 29

<211> 657

<212> DNA

<213> Homo sapiens

<400> 29

taccaggtgg cggccgtgca aggggacctg gccagcctcc gggcagagct gcagagccac 60  
 cagcgggaga agctgccagc aagagcaaga gcccgaagg ccggtctggg ggaagctcca 120  
 gctgtcaccg cgggactgaa aatctttgaa ccaccagctc caggagaagg caactccagt 180  
 cagagcagca gaaataagcg tgctattcag ggtgcagaag aaacagtcac tcaagactgc 240  
 ttgcaactga ttgcagacag tgaaacacca actatacaaa aaggatctta cacatttggt 300  
 ccatggcttc tcagctttta aaggggaagt gccctagaag aaaaagagaa taaaatattg 360  
 gtcaaagaaa ctggttactt ttttatatat ggtcagggtt tatacactga taagacctat 420  
 gccatgggac atctaattca gaggaacaaa gtccatgtct ttggggatga attgagctct 480  
 gtgactttgt ttcgatgtat tcaaaatatg cctgaaacac taccataata ttctgtctat 540  
 tcagctggca ttgcaaaact ggaagaagg gatgaacttc aacttgcaat accacgagaa 600  
 aatgcacaaa tatcactgga tggagatgtc acattttttg gtgccctcaa actgctg 657

B23

<210> 30  
 <211> 219  
 <212> PRT  
 <213> Homo sapiens

<400> 30  
 Tyr Gln Val Ala Ala Val Gln Gly Asp Leu Ala Ser Leu Arg Ala Glu  
     1                    5                    10                    15  
 Leu Gln Ser His His Ala Glu Lys Leu Pro Ala Arg Ala Arg Ala Pro  
             20                    25                    30  
 Lys Ala Gly Leu Gly Glu Ala Pro Ala Val Thr Ala Gly Leu Lys Ile  
             35                    40                    45  
 Phe Glu Pro Pro Ala Pro Gly Glu Gly Asn Ser Ser Gln Ser Ser Arg  
     50                    55                    60  
 Asn Lys Arg Ala Ile Gln Gly Ala Glu Glu Thr Val Ile Gln Asp Cys  
     65                    70                    75                    80  
 Leu Gln Leu Ile Ala Asp Ser Glu Thr Pro Thr Ile Gln Lys Gly Ser  
             85                    90                    95  
 Tyr Thr Phe Val Pro Trp Leu Leu Ser Phe Lys Arg Gly Ser Ala Leu  
             100                    105                    110  
 Glu Glu Lys Glu Asn Lys Ile Leu Val Lys Glu Thr Gly Tyr Phe Phe  
     115                    120                    125  
 Ile Tyr Gly Gln Val Leu Tyr Thr Asp Lys Thr Tyr Ala Met Gly His  
     130                    135                    140  
 Leu Ile Gln Arg Lys Lys Val His Val Phe Gly Asp Glu Leu Ser Leu  
     145                    150                    155                    160  
 Val Thr Leu Phe Arg Cys Ile Gln Asn Met Pro Glu Thr Leu Pro Asn  
             165                    170                    175  
 Asn Ser Cys Tyr Ser Ala Gly Ile Ala Lys Leu Glu Glu Gly Asp Glu  
             180                    185                    190  
 Leu Gln Leu Ala Ile Pro Arg Glu Asn Ala Gln Ile Ser Leu Asp Gly  
             195                    200                    205  
 Asp Val Thr Phe Phe Gly Ala Leu Lys Leu Leu  
     210                    215

<210> 31  
 <211> 38  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <221> primer\_bind  
 <223> primer

B23

<400> 31  
ggtcgcccgtt tctaacgcgg ccgttcaggg tccagaag 38

<210> 32  
<211> 49  
<212> DNA  
<213> Artificial Sequence

<220>  
<221> primer\_bind  
<223> primer

<400> 32  
ctgggttcggc ccaagggtacc aagcttgtagc ctagatctt ttctagatc 49

<210> 33  
<211> 21  
<212> DNA  
<213> Artificial Sequence

<220>  
<221> primer\_bind  
<223> primer

<400> 33  
ctggtagttc ttcggagtg g 21

<210> 34  
<211> 19  
<212> DNA  
<213> Artificial Sequence

<220>  
<221> primer\_bind  
<223> primer

<400> 34  
cgcgtagaa acggcgacc 19

<210> 35  
<211> 22  
<212> DNA  
<213> Artificial Sequence

<220>  
<221> primer\_bind  
<223> primer

<220>  
<221> misc\_feature  
<222> (7)  
<223> n equals deoxyinosine

<220>  
<221> misc\_feature



B23

<222> (12)  
<223> n equals deoxyinosine

<220>  
<221> misc\_feature  
<222> (16)  
<223> n equals deoxyinosine

<400> 35  
taccagntgg cngccntgca ag

22

<210> 36  
<211> 22  
<212> DNA  
<213> Artificial Sequence

<220>  
<221> primer\_bind  
<223> primer

<220>  
<221> misc\_feature  
<222> (3)  
<223> n equals deoxyinosine

<220>  
<221> misc\_feature  
<222> (14)  
<223> n equals deoxyinosine

<220>  
<221> misc\_feature  
<222> (16)..(17)  
<223> n equals deoxyinosine

<400> 36  
gtnacagcag tttnanngca cc

22

<210> 37  
<211> 866  
<212> DNA  
<213> Mus musculus

<400> 37  
atggatgagt ctgcaaagac cctgccacca ccgtgcctct gtttttgctc cgagaaagga 60  
gaagatatga aagtgggata tgatcccac actccgcaga aggaggaggg tgccctgggtt 120  
gggatctgca gggatggaag gctgctggct gctaccctcc tgctggccct gttgtccagc 180  
agtttcacag cgatgtcctt gtaccagttg gctgccttgc aagcagacct gatgaacctg 240  
cgcatggagc tgcagagcta ccgaggttca gcaacaccag ccgccgcggg tgctccagag 300  
ttgaccgctg gagtcaaact cctgacaccg gcagctcctc gacccacaaa ctccagccgc 360  
ggccacagga acagacgcgc cttccaggga ccagaggaaa cagaacaaga tgtagacctc 420  
tcagctcctc ctgcaccatg cctgcctgga tgccgccatt ctcaacatga tgataatgga 480  
atgaacctca gaaacatcat tcaagactgt ctgcagctga ttgcagacag cgacacgccg 540  
gccttggagg agaaagagaa caaaatagtg gtgaggcaaa caggctattt cttcatctac 600  
agccagggtc tatacacgga ccccatcttt gctatgggtc atgtcatcca gaggaagaaa 660  
gtacacgtct ttggggacga gctgagcctg gtgaccctgt tccgatgtat tcagaatatg 720  
cccaaaacac tgccaacaa ttcttgctac tcggctggca tcgcgaggct ggaagaagga 780  
gatgagattc agcttgcaat tcctcgggag aatgcacaga tttcacgcaa cggagacgac 840  
accttctttg gtgcctaaa actgct 866

B23

<210> 38  
 <211> 289  
 <212> PRT  
 <213> Mus musculus

<400> 38

Met Asp Glu Ser Ala Lys Thr Leu Pro Pro Pro Cys Leu Cys Phe Cys  
 1 5 10 15

Ser Glu Lys Gly Glu Asp Met Lys Val Gly Tyr Asp Pro Ile Thr Pro  
 20 25 30

Gln Lys Glu Glu Gly Ala Trp Phe Gly Ile Cys Arg Asp Gly Arg Leu  
 35 40 45

Leu Ala Ala Thr Leu Leu Leu Ala Leu Leu Ser Ser Ser Phe Thr Ala  
 50 55 60

Met Ser Leu Tyr Gln Leu Ala Ala Leu Gln Ala Asp Leu Met Asn Leu  
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Arg Met Glu Leu Gln Ser Tyr Arg Gly Ser Ala Thr Pro Ala Ala Ala  
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Gly Ala Pro Glu Leu Thr Ala Gly Val Lys Leu Leu Thr Pro Ala Ala  
 100 105 110

Pro Arg Pro His Asn Ser Ser Arg Gly His Arg Asn Arg Arg Ala Phe  
 115 120 125

Gln Gly Pro Glu Glu Thr Glu Gln Asp Val Asp Leu Ser Ala Pro Pro  
 130 135 140

Ala Pro Cys Leu Pro Gly Cys Arg His Ser Gln His Asp Asp Asn Gly  
 145 150 155 160

Met Asn Leu Arg Asn Ile Ile Gln Asp Cys Leu Gln Leu Ile Ala Asp  
 165 170 175

Ser Asp Thr Pro Ala Leu Glu Glu Lys Glu Asn Lys Ile Val Val Arg  
 180 185 190

Gln Thr Gly Tyr Phe Phe Ile Tyr Ser Gln Val Leu Tyr Thr Asp Pro  
 195 200 205

Ile Phe Ala Met Gly His Val Ile Gln Arg Lys Lys Val His Val Phe  
 210 215 220

Gly Asp Glu Leu Ser Leu Val Thr Leu Phe Arg Cys Ile Gln Asn Met  
 225 230 235 240

Pro Lys Thr Leu Pro Asn Asn Ser Cys Tyr Ser Ala Gly Ile Ala Arg  
 245 250 255

Leu Glu Glu Gly Asp Glu Ile Gln Leu Ala Ile Pro Arg Glu Asn Ala  
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Gln Ile Ser Arg Asn Gly Asp Asp Thr Phe Phe Gly Ala Leu Lys Leu

B23

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280

285

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